CLAIMS:

1. A method of forming a non-volatile resistance variable device, comprising:

forming a patterned mass comprising elemental silver over a substrate;

forming a layer comprising elemental selenium over the substrate and including the patterned mass comprising elemental silver;

exposing the substrate to conditions effective to react only some of the elemental selenium with the elemental silver to form the patterned mass to comprise silver selenide;

removing unreacted elemental selenium from the substrate;

providing a first conductive electrode in electrical connection with one portion of the patterned mass comprising silver selenide;

providing a germanium selenide comprising material in electrical connection with another portion of the patterned mass comprising silver selenide; and

providing a second conductive electrode in electrical connection with the germanium selenide comprising material.

2. The method of claim 1 wherein the patterned mass comprises at least 50 molar percent elemental silver prior to the exposing.

3. The method of claim 1 wherein the patterned mass comprises at least 95 molar percent elemental silver prior to the exposing.

4. The method of claim 1 wherein the layer comprising elemental selenium comprises at least 90 molar percent elemental selenium prior to the exposing.

5. The method of claim 1 wherein the layer comprising elemental selenium comprises at least 95 molar percent elemental selenium prior to the exposing.

6. The method of claim 1 wherein the exposing and the removing occur in a common processing step.

7. The method of claim 1 wherein the exposing and the removing occur in different processing steps.

8. The method of claim 1 wherein the exposing and the removing occur in a common processing step comprising at least 40°C and an atmosphere which removes unreacted elemental selenium by oxidation thereof.

9. The method of claim 1 wherein the removing of the unreacted elemental selenium comprises chemical etching after the exposing.

10. The method of claim 1 wherein the removing of the unreacted elemental selenium comprises evaporation after the exposing.

11. The method of claim 1 wherein the exposing forms the patterned mass to comprise at least 50 molar percent silver selenide.

12. The method of claim 1 wherein the exposing forms the patterned mass to comprise at least 80 molar percent silver selenide.

13. The method of claim 1 wherein the exposing drives at least a majority of that portion of the elemental selenium received over the patterned mass into the patterned mass.

14. The method of claim 1 wherein the patterned mass comprises greater than 50 molar percent elemental silver prior to the exposing, the exposing forming an outermost portion of the patterned mass to comprise greater than 50 molar percent silver selenide, with an innermost portion of the patterned mass remaining at greater than 50 molar percent elemental silver.

15. The method of claim 1 wherein the patterned mass comprises greater than 90 molar percent elemental silver prior to the exposing, the exposing forming an outermost portion of the patterned mass to comprise greater than 90 molar percent silver selenide, with an innermost portion of the patterned mass remaining at greater than 90 molar percent elemental silver.

16. The method of claim 1 wherein the patterned mass as formed prior to the exposing has a maximum first thickness, the exposing forming the patterned mass to have a maximum second thickness which is greater than the maximum first thickness.

17. The method of claim 1 wherein the removing removes all unreacted elemental selenium from the substrate.

18. The method of claim 1 wherein forming the patterned mass comprising elemental silver comprises depositing an elemental silver comprising material, photopatterning it, and subtractively etching it after the photopatterning.

19. The method of claim 1 wherein forming the patterned mass comprising elemental silver comprises forming a patterned opening within insulative material over the substrate, and at least partially filling the opening with an elemental silver comprising material.

20. A method of forming a non-volatile resistance variable device, comprising:

forming a patterned mass comprising at lest 90 molar percent elemental silver over a substrate and to a first maximum thickness;

forming a layer comprising at least 90 molar percent elemental selenium over the substrate and including the patterned mass comprising elemental silver;

exposing the substrate to conditions effective to react only some of the elemental selenium with the elemental silver to form the patterned mass to comprise silver selenide, the exposing forming the silver selenide to be rich in silver, and forming the patterned mass to have a maximum second thickness which is greater than the maximum first thickness, the exposing forming the patterned mass to comprise at least 80 molar percent silver selenide, the exposing driving at least a majority of that portion of the elemental selenium received over the patterned mass into the patterned mass;

removing all unreacted elemental selenium from the substrate;

providing a first conductive electrode in electrical connection with one portion of the patterned mass comprising silver selenide;

providing a germanium selenide comprising material in electrical connection with another portion of the patterned mass comprising silver selenide; and

providing a second conductive electrode in electrical connection with the germanium selenide comprising material.

21. A method of forming a non-volatile resistance variable device, comprising:

forming a first conductive electrode material over a substrate;

forming an insulative material over the first conductive electrode material and an opening therethrough to the first conductive electrode material, the opening comprising a desired shape of at least a portion of a final resistance setable structure of the device;

filling the opening with an elemental silver comprising material in electrical connection with the first conductive electrode material;

forming a layer comprising elemental selenium over the insulative material and over the elemental silver comprising material within the opening;

exposing the substrate to conditions effective to react elemental selenium received over the elemental silver to form at least a portion of the filled opening to comprise silver selenide;

removing unreacted elemental selenium received over the insulative material from the substrate; and

providing a germanium selenide comprising material in electrical connection with the silver selenide; and

providing a second conductive electrode in electrical connection with the germanium selenide comprising material.

22. The method of claim 21 wherein the exposing forms at least a majority portion of the filled opening to comprise silver selenide.

23. The method of claim 21 wherein the exposing forms less than one half of the filled opening to comprise silver selenide.

24. The method of claim 21 wherein the elemental silver comprising material comprises at least 50 molar percent elemental silver prior to the exposing.

25. The method of claim 21 wherein the elemental silver comprising material comprises at least 95 molar percent elemental silver prior to the exposing.

26. The method of claim 21 wherein the layer comprising elemental selenium comprises at least 90 molar percent elemental selenium prior to the exposing.

27. The method of claim 21 wherein the layer comprising elemental selenium comprises at least 95 molar percent elemental selenium prior to the exposing.

28. The method of claim 21 wherein the exposing and the removing occur in a common processing step.

29. The method of claim 21 wherein the exposing and the removing occur in different processing steps.

30. The method of claim 21 wherein the exposing and the removing occur in a common processing step comprising at least 40°C and an atmosphere which removes unreacted elemental selenium by oxidation thereof.

31. The method of claim 21 wherein the removing of the unreacted elemental selenium comprises chemical etching after the exposing.

32. The method of claim 21 wherein the removing of the unreacted elemental selenium comprises evaporation after the exposing.

33. The method of claim 21 wherein the exposing forms at least 80% of the filled opening to comprise silver selenide.

34. The method of claim 21 wherein the exposing drives at least a majority of that portion of the elemental selenium received over the elemental silver comprising material into the elemental silver comprising material.

35. The method of claim 21 wherein the filled opening comprises greater than 50 molar percent elemental silver prior to the exposing, the exposing forming an outermost portion of the filled opening to comprise greater than 50 molar percent silver selenide, with an innermost portion of the filled opening remaining at greater than 50 molar percent elemental silver.

36. The method of claim 21 wherein the filled opening comprises greater than 90 molar percent elemental silver prior to the exposing, the exposing forming an outermost portion of the filled opening to comprise greater than 90 molar percent silver selenide, with an innermost portion of the filled opening remaining at greater than 90 molar percent elemental silver.

37. The method of claim 21 wherein the insulative material has a substantially planar outermost surface proximate the opening and the elemental silver comprising material within the filled opening has an outermost surface which is coplanar with the insulative material outer surface prior to the exposing, the elemental silver comprising material within the opening prior to the exposing having a maximum first thickness, the exposing forming the patterned mass to have a maximum second thickness which is greater than the maximum first thickness.

38. The method of claim 21 wherein the removing removes all unreacted elemental selenium from the substrate.

39. A method of forming a silver selenide comprising structure, comprising:

forming a substrate comprising a first outer portion and a second outer portion, the first outer portion comprising a patterned mass comprising elemental silver, the second outer portion not comprising elemental silver;

forming a layer comprising elemental selenium over the first and second outer portions; and

exposing the substrate to oxidizing conditions effective to both, a) react elemental selenium received over the first portion with elemental silver to form the patterned mass to comprise silver selenide, and b) remove elemental selenium of the layer over the second outer portion from the substrate.

40. The method of claim 39 wherein the exposing removes some of the elemental selenium of the layer over the first portion from the substrate.

41. The method of claim 39 wherein the exposing drives at least a majority of that portion of the elemental selenium received over the first portion into the patterned mass.

42. The method of claim 39 wherein the exposing drives at least a 80 molar percent of that portion of the elemental selenium received over the first portion into the patterned mass.

43. The method of claim 39 wherein the exposing comprises a temperature of from about 40°C to about 250°C.

44. The method of claim 39 wherein the oxidizing conditions comprise an atmosphere comprising at least one of N_2O, NO_x, O_3, F_2, and Cl_2.

45. The method of claim 39 wherein the exposing removes all elemental selenium of the layer over the second outer portion from the substrate.

46. The method of claim 39 wherein the exposing removes all unreacted elemental selenium from the substrate.

47. The method of claim 39 wherein the patterned mass comprises at least 95 molar percent elemental silver prior to the exposing.

48. The method of claim 39 wherein the layer comprising elemental selenium comprises at least 95 molar percent elemental selenium prior to the exposing.

49. The method of claim 39 wherein the patterned mass as formed prior to the exposing has a maximum first thickness, the exposing forming the patterned mass to have a maximum second thickness which is greater than the maximum first thickness.

50. The method of claim 39 wherein forming the patterned mass comprising elemental silver comprises depositing an elemental silver comprising material, photopatterning it, and subtractively etching it after the photopatterning.

51. The method of claim 39 wherein forming the patterned mass comprising elemental silver comprises forming a patterned opening within insulative material over the substrate, and at least partially filling the opening with an elemental silver comprising material.